**Index of Claims** 

| Application | n/Control | No. |
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10/723,634

Examiner

Anh Q. Tran

Applicant(s)/Patent under Reexamination

MULLIGAN, DANIEL
Art Unit

2819

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
|   | Interference |

| A | Appeal   |
|---|----------|
| o | Objected |

| Cla           | aim      |                                        |                       |                                                   | Date     | •        |                 |                                                                  |       | CI          | aim      |                                              |                 |                 | Di       | ate               |                                                                  |          |          | ][         | Cla          | aim            |                                                  |                 |                                                  | D                                                | ate      |                                                  |                 | _        |          |
|---------------|----------|----------------------------------------|-----------------------|---------------------------------------------------|----------|----------|-----------------|------------------------------------------------------------------|-------|-------------|----------|----------------------------------------------|-----------------|-----------------|----------|-------------------|------------------------------------------------------------------|----------|----------|------------|--------------|----------------|--------------------------------------------------|-----------------|--------------------------------------------------|--------------------------------------------------|----------|--------------------------------------------------|-----------------|----------|----------|
|               | 100      | 3                                      | -                     |                                                   |          |          |                 |                                                                  |       |             | <u></u>  |                                              |                 |                 |          |                   |                                                                  |          |          |            |              | - <del>a</del> |                                                  |                 | - 1                                              |                                                  | ı        |                                                  |                 |          |          |
| Final         | <u> </u> | 21                                     | -                     |                                                   | 1        |          |                 |                                                                  |       | Final       | Į į      | H                                            |                 | i               |          |                   | 1                                                                | ı        |          |            | Final        | ë              |                                                  |                 |                                                  |                                                  |          | -                                                |                 |          | -        |
| ίĒ            |          | -+                                     | -                     |                                                   |          |          | -               | -                                                                |       | 证           | Original |                                              |                 |                 | 1        |                   | 1                                                                |          |          |            | Œ            | Original       |                                                  | - 1             | -                                                |                                                  | -        | - 1                                              | -               | -1       | ļ        |
|               | <u> </u> | 23                                     |                       | _                                                 |          |          | 4               | $\bot$                                                           |       |             |          | $\vdash$                                     |                 | $\dashv$        | +        |                   | +-                                                               | 4        | ┡        |            |              |                | -                                                | $\dashv$        | -                                                |                                                  |          | 4                                                | +               | +        | 4        |
| <u> </u>      | 1        | Ň                                      | +                     | +                                                 | -        | $\dashv$ | -               | -                                                                |       |             | 51       | _                                            | $\dashv$        | +               | +        | 4                 | +                                                                |          | ╀        |            |              | 101            | $\dashv$                                         | $\dashv$        | -+                                               |                                                  | -        | 4                                                | +               | 十        |          |
|               | 2        | 0                                      |                       | +                                                 | $\vdash$ | $\dashv$ |                 |                                                                  | 4     |             | 52       | Н                                            |                 | +               | +        | +                 | +                                                                | +-       | ├        |            |              | 102<br>103     | $\dashv$                                         | $\dashv$        | +                                                | -                                                | -        | $\dashv$                                         | $\dashv$        | +        | 4        |
|               | 3        | 0                                      | -                     | +-                                                | $\vdash$ | $\dashv$ | +               | +                                                                | -     |             | 53<br>54 | Н                                            | $\dashv$        | +               | +        | +                 | ╁                                                                | +-       | +-       |            |              | 103            | -                                                | $\dashv$        | $\dashv$                                         | ⇥                                                | -+       | $\dashv$                                         | +               | +        | _        |
|               | 5        | 1/                                     | +                     | ┿                                                 | +-       | $\dashv$ | -               | +                                                                |       |             | 55       | Н                                            | $\dashv$        | $\dashv$        | $\dashv$ | +                 | ╁                                                                | +        | ⊢        |            |              | 105            |                                                  | $\dashv$        | $\dashv$                                         | $\dashv$                                         | $\dashv$ | -                                                | $\dashv$        | +        | -        |
| $\vdash$      | 6        | 0                                      |                       | +                                                 | $\vdash$ | $\dashv$ | +               |                                                                  | ┨     |             | 56       | -                                            | $\dashv$        | +               | +        | ╅                 | 十                                                                | +        | $\vdash$ |            |              | 106            | 寸                                                | $\dashv$        | -                                                | $\dashv$                                         | $\dashv$ | $\dashv$                                         | _               | +        | _        |
|               | 7        | 0                                      | -                     | +                                                 | $\vdash$ | $\dashv$ | $\dashv$        | -                                                                | 1     |             | 57       | ╁                                            |                 | $\dashv$        | +        | +                 | +                                                                |          | T        | <b> </b>   | -            | 107            | _                                                |                 | _                                                | $\neg$                                           | $\neg$   | ┪                                                | $\dashv$        | 十        | _        |
|               | 8        | 7                                      | +                     | +                                                 | †        | $\vdash$ | 十               | _                                                                | 1     |             | 58       | $\vdash$                                     | $\dashv$        | $\top$          | $\top$   | $\top$            | +                                                                | 1        | 1        |            |              | 108            | 一                                                | 寸               | $\neg$                                           |                                                  | $\neg$   | $\neg$                                           |                 | 寸        | _        |
| <b></b>       | 9        | =                                      | _                     | +                                                 |          | П        | 1               | +                                                                | 1     | $\vdash$    | 59       | $\vdash$                                     | $\Box$          | 丁               | ┪        | T                 | 1                                                                | 1        | 1        |            |              | 109            |                                                  |                 |                                                  |                                                  |          |                                                  |                 | $\Box$   | _        |
|               | 10       | П                                      | $\neg \vdash$         |                                                   | T        | П        |                 |                                                                  | 1     |             | 60       | Г                                            |                 | $\Box$          |          |                   | $\top$                                                           | 1        | T        |            |              | 110            |                                                  |                 |                                                  |                                                  |          |                                                  |                 | $\Box$   | _        |
|               | 11       | Ш                                      |                       | 1-                                                |          |          |                 |                                                                  | ];;;; |             | 61       |                                              |                 |                 | I        |                   |                                                                  |          |          | ]          |              | 111            |                                                  |                 | $\Box$                                           |                                                  |          |                                                  | $\Box$          | $\perp$  | _        |
|               | 12       | $\prod$                                |                       | I                                                 |          |          | $\Box$          |                                                                  |       |             | 62       |                                              | Ш               | $\Box$          | $\Box$   |                   | $\perp$                                                          | I        |          |            |              | 112            | $\Box$                                           |                 | _                                                | _                                                |          | ]                                                |                 | $\dashv$ |          |
|               | 13       | Ш                                      |                       |                                                   |          | Ц        |                 |                                                                  |       |             | 63       | <u> </u>                                     | Ш               | _               | $\perp$  | $\perp$           | $\perp$                                                          | $\perp$  | 1_       | <b>.</b>   |              | 113            |                                                  | _               |                                                  | _                                                | _        | _                                                | $\dashv$        | $\dashv$ |          |
| <u> </u>      | 14       | Ш                                      | $\bot$                | $\perp$                                           | _        | $\sqcup$ | $\dashv$        | $\bot$                                                           | 4     | <u> </u>    | 64       | <b>L</b>                                     | $\sqcup$        | $\dashv$        | 4        | 4-                | 4                                                                | +        | ╀        | 4          | <u> </u>     | 114            | $\perp$                                          |                 | _                                                | _                                                | _        |                                                  | $\dashv$        | $\dashv$ |          |
|               | 15       | 르                                      |                       | _                                                 | 1        | Ш        | _               | _                                                                |       | <u> </u>    | 65       | ┞                                            |                 | _               | +        | 4                 | 4                                                                | _        | ╄        | ⇃᠁         |              | 115            | $\dashv$                                         | -               |                                                  |                                                  | $\dashv$ |                                                  | $\dashv$        | $\dashv$ |          |
| <u></u>       | 16       | 1                                      | _                     | +                                                 | ļ        | Н        | -               | $\dashv$                                                         | 4     | <u> </u>    | 66       | ╀                                            | $\vdash \vdash$ | $\dashv$        | -        | +                 | +                                                                | - -      | +        | 4          | <b></b>      | 116<br>117     |                                                  | $\dashv$        | -                                                | -                                                | $\dashv$ | -                                                | +               | $\dashv$ | _        |
| <b>—</b>      | 17       | H                                      | +                     | +                                                 | +-       | $\vdash$ | $\dashv$        |                                                                  | 4     | <u> </u>    | 67<br>68 | $\vdash$                                     | Н               | -+              | $\dashv$ | +                 | +                                                                | +        | +        | -          | <u> </u>     | 117            | $\vdash$                                         | $\dashv$        | -                                                | $\dashv$                                         | -        | $\dashv$                                         |                 | $\dashv$ | _        |
| <u> </u>      | 18       | Ш                                      |                       | +                                                 | +-       | $\vdash$ | $\dashv$        |                                                                  | -     | _           |          | -                                            | Н               | $\dashv$        | +        | +                 | ╁                                                                | +-       | ╁        | -          | <del> </del> | 119            | -                                                | $\dashv$        | -+                                               |                                                  | $\dashv$ |                                                  | -               | $\dashv$ | _        |
| ļ             | 19       | Ň                                      |                       | +                                                 | ┿        | $\vdash$ | -               | +                                                                | -     | -           | 69<br>70 | ╁                                            | Н               | $\dashv$        | $\dashv$ | +                 | +                                                                | -        | ╁        | -          | ├            | 120            | $\dashv$                                         | $\dashv$        | $\dashv$                                         | -                                                | $\dashv$ | $\dashv$                                         | $\dashv$        | $\dashv$ | _        |
| <u> </u>      | 20       | 0                                      |                       | +                                                 | +        | ┝╌┤      | $\dashv$        | +                                                                | ╣     | <u> </u>    | 71       | ╁                                            | Н               | $\dashv$        | $\dashv$ | +                 | ╅                                                                | +        | ╫        | 1          |              | 121            |                                                  | $\dashv$        | $\dashv$                                         |                                                  |          | $\neg$                                           | 十               | $\dashv$ | _        |
| -             | 22       | Đ                                      | -                     | ╁                                                 | +        | $\vdash$ | -               | +                                                                | -     | <del></del> | 72       | ╁                                            | Н               | $\dashv$        | +        |                   | +                                                                | +-       | +-       | 1          |              | 122            | Н                                                |                 | $\dashv$                                         |                                                  |          | $\neg$                                           | 一               | 十        | _        |
| $\vdash$      | 23       |                                        | 4                     | +                                                 | +        | $\vdash$ | -               | +                                                                | 1     |             | 73       | +                                            | Н               |                 | $\dashv$ | +                 | +                                                                | ╅        | +        | 1          |              | 123            |                                                  |                 |                                                  |                                                  |          |                                                  | 寸               | 寸        | _        |
| <b>—</b>      | 24       | ۲                                      | +                     | +                                                 | ╁        | H        |                 | +                                                                | ┧     |             | 74       | +                                            | -               |                 | $\dashv$ | +                 | +                                                                | +        | +        | 1          |              | 124            |                                                  |                 | $\neg \neg$                                      |                                                  |          |                                                  | T               | 寸        | _        |
|               | 25       | Н                                      | _                     | +                                                 | +        |          | $\dashv$        | $\top$                                                           | 1     |             | 75       | T                                            | Ė               |                 | $\dashv$ | $\top$            | +                                                                | $\dashv$ | 1        | 1          |              | 125            |                                                  |                 |                                                  |                                                  |          |                                                  |                 | $\neg$   | _        |
|               | 26       | $\vdash$                               |                       | $\top$                                            | ╁        | П        | $\Box$          | $\top$                                                           | 1     |             | 76       | 1                                            | П               | T               | ╗        |                   |                                                                  |          |          | 1          |              | 126            | · ·                                              |                 |                                                  |                                                  |          |                                                  |                 | $\Box$   |          |
|               | 27       | П                                      |                       | T                                                 | $\top$   |          |                 |                                                                  | 1     |             | 77       |                                              |                 |                 | $\Box$   |                   |                                                                  |          |          |            |              | 127            |                                                  |                 |                                                  |                                                  |          |                                                  |                 |          |          |
|               | 28       | П                                      |                       | Τ                                                 | T        | П        |                 |                                                                  |       |             | 78       |                                              |                 |                 |          |                   |                                                                  |          |          |            |              | 128            |                                                  |                 |                                                  |                                                  |          |                                                  | $\Box$          | ╧        |          |
|               | 29       |                                        |                       |                                                   |          |          |                 |                                                                  |       |             | 79       |                                              |                 |                 |          |                   |                                                                  |          |          |            |              | 129            |                                                  |                 |                                                  |                                                  |          |                                                  | 1               | $\dashv$ |          |
|               | 30       |                                        |                       |                                                   |          |          |                 |                                                                  |       |             | 80       | L                                            | $oxed{oxed}$    | $\Box$          | _        |                   | _                                                                |          | $\perp$  | _          |              | 130            |                                                  |                 |                                                  |                                                  |          |                                                  | _               | _        | _        |
|               | 31       |                                        |                       | $\perp$                                           | ┖        |          |                 |                                                                  |       |             | 81       | <del> </del>                                 | _               | Ц               | 4        | _                 | 1                                                                | _        | $\bot$   | 4          |              | 131            | _                                                |                 |                                                  |                                                  |          |                                                  | $\dashv$        | $\dashv$ | _        |
| <u></u>       | 32       | $\sqcup$                               | oxdot                 | $\perp$                                           | _        | $\sqcup$ | $\sqcup$        | $\perp$                                                          | 4     | <u> </u>    | 82       | ╄                                            | ┞               | $\vdash$        | $\dashv$ | -                 | $\perp$                                                          | +        | +        | 4::::      | ⊢            | 132            | $\vdash$                                         | $\vdash \vdash$ | $\vdash$                                         | $\vdash$                                         | Н        | _                                                | $\vdash \vdash$ |          | —        |
| <u> </u>      | 33       | $\perp$                                | $\sqcup \!\!\! \perp$ | +                                                 | $\perp$  | Н        | $\sqcup$        |                                                                  | -     | <u> </u>    | 83       | +                                            | $\vdash$        | $\vdash$        | $\dashv$ | -                 | +                                                                | -        | +        | -          | <u> </u>     | 133            |                                                  | $\vdash$        | $\vdash$                                         | <u> </u>                                         | $\vdash$ | -                                                | $\vdash$        | $\dashv$ | _        |
| <u> </u>      | 34       |                                        | $\vdash \vdash$       | +                                                 | 4-       | Н        | $\vdash \vdash$ |                                                                  | -     | $\vdash$    | 84       | +                                            | ⊢               | $\vdash \vdash$ | -        | $\dashv$          | +                                                                | +        | +        | -          |              | 134            | -                                                | $\vdash$        | $\vdash$                                         | <del>                                     </del> | -        | ⊢                                                | $\vdash$        | $\dashv$ | _        |
| $\vdash$      | 35       |                                        | $\vdash \vdash$       | +                                                 | +        | $\vdash$ | $\vdash \vdash$ |                                                                  | -     | -           | 85<br>86 | +                                            | $\vdash$        | $\vdash$        | $\dashv$ | $\dashv$          | +                                                                | +-       | +        | -          | -            | 136            | <del>                                     </del> | $\vdash$        | $\vdash$                                         | ┢                                                | Н        |                                                  |                 | $\dashv$ |          |
| -             | 36<br>37 | +-                                     | $\vdash$              | +                                                 | +        | $\vdash$ | $\vdash \vdash$ | +                                                                | -     | $\vdash$    | 87       | +                                            | $\vdash$        | $\vdash$        | +        | $\dashv$          | +                                                                | +        | +        | ┧┈         | -            | 137            | -                                                | Н               | $\vdash$                                         |                                                  | $\vdash$ |                                                  | H               | ᆉ        | _        |
| -             | 38       | -                                      | -                     | +                                                 | +-       | $\vdash$ | $\vdash$        | +                                                                | -     | $\vdash$    | 88       | +                                            | +               | $\vdash \vdash$ |          | $\dashv$          | +                                                                | +        | ╁        | ┨Ш         | $\vdash$     | 138            | $\vdash$                                         | H               | H                                                | $\vdash$                                         | $\vdash$ | <del>                                     </del> | H               | 一        | _        |
| $\vdash$      | 39       | +                                      | $\vdash \vdash$       | +                                                 | +        | $\vdash$ |                 |                                                                  | ┨Ш    | $\vdash$    | 89       | +                                            | T               | $\vdash$        | -        | $\dashv$          | 十                                                                | +        | +        | 1          |              | 139            | T                                                | $\vdash$        | <del>                                     </del> | T                                                |          | <del>                                     </del> |                 | -        | _        |
| $\vdash$      | 40       | +-                                     | $\vdash$              | +                                                 | +        | П        | $\vdash$        | +                                                                | ۱     |             | 90       | T                                            | $t^-$           | H               | 7        | $\dashv$          | $\neg$                                                           | 十        | T        | 1          |              | 140            | Г                                                |                 |                                                  | Γ                                                | 1        | T                                                | П               | $\neg$   |          |
|               | 41       | 1                                      | $\vdash$              | 十                                                 | $\top$   |          | $  \neg  $      | $\dashv$                                                         | ۱     |             | 91       |                                              | $\top$          | $\Box$          | 寸        | $\neg$            | $\top$                                                           | 1        | T        | 1          |              | 141            |                                                  |                 |                                                  |                                                  |          |                                                  |                 |          |          |
|               | 42       | T                                      | $\sqcap$              | $\top$                                            | 1        | П        | П               |                                                                  | 1     |             | 92       | T.                                           |                 | П               | コ        |                   |                                                                  |          |          |            |              | 142            |                                                  |                 |                                                  |                                                  |          |                                                  |                 |          |          |
|               | 43       |                                        |                       |                                                   | $\perp$  |          |                 |                                                                  | ]     |             | 93       |                                              |                 |                 |          |                   | $\Box$                                                           |          | Ι        | ]          |              | 143            |                                                  |                 |                                                  |                                                  |          | 匚                                                | Ш               |          | _        |
|               | 44       |                                        |                       | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $\perp$  |          |                 |                                                                  | ]     |             | 94       |                                              |                 |                 |          | $\Box$            | $\Box$                                                           |          | $\perp$  |            |              | 144            |                                                  |                 |                                                  |                                                  |          | 匚                                                | $\Box$          | $\Box$   | L        |
|               | 45       |                                        |                       |                                                   |          |          | П               | $\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ |       |             | 95       |                                              | 匚               | Ц               |          | $oldsymbol{\bot}$ | $\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ |          | $\perp$  | <b>↓</b> ∭ | <u></u>      | 145            |                                                  | L               | L                                                | _                                                | <u> </u> | _                                                | $\square$       |          | $\vdash$ |
|               | 46       | $\perp$                                | $\Box$                | $\perp$                                           |          |          | Ц               |                                                                  | _     | _           | 96       |                                              |                 | Ц               |          | $\perp$           | _                                                                |          | $\bot$   | 4          | <u> </u>     | 146            | ╙                                                | $\vdash$        | <u> </u>                                         | $\vdash$                                         | <u> </u> | <u> </u>                                         | $\sqcup$        |          | $\vdash$ |
| <u> </u>      | 47       | ╄-                                     | $\sqcup$              | $\bot$                                            | $\perp$  | igspace  | Ш               | $\perp$                                                          | 4     | <u> </u>    | 97       |                                              | $\perp$         | Ш               | _        | 4                 | 4                                                                | $\perp$  | +        | 4          |              | 147            | <del> </del>                                     | 1               | <u> </u>                                         | <b>L</b>                                         | -        | ⊢                                                | Н               | $\dashv$ | <b>—</b> |
| $\vdash$      | 48       |                                        | $\vdash$              | +                                                 | $\perp$  | ₩        | Щ               | $\bot$                                                           | 4     | <b>—</b>    | 98       |                                              | $\vdash$        | $\sqcup$        | _        | -                 | -                                                                | +        | +        | 4          | <u> </u>     | 148            | <u> </u>                                         | $\vdash$        | _                                                | ⊢                                                | ⊢        | ├                                                | $\vdash$        | $\dashv$ | $\vdash$ |
| -             | 49       | +                                      | Н                     | 4.                                                | +        |          | ⊢               | -                                                                | -     | <u> </u>    | 99       |                                              | ┼               | $\sqcup$        |          |                   |                                                                  | +        | +        | -          | <u> </u>     | 149            | 1—                                               | ⊢               | $\vdash$                                         | ₩                                                | ⊢        | ⊢                                                | $\vdash$        | _        | $\vdash$ |
| $\sqsubseteq$ | 50       | ــــــــــــــــــــــــــــــــــــــ | L_L                   |                                                   | 1        | 1        | L L L           |                                                                  | ::::  | :           | 100      | <u>'                                    </u> | <u> </u>        | Ш               |          |                   | $\perp$                                                          | L_       |          | _::::      | ـــــا:      | 150            | <u> </u>                                         | <u> </u>        | Ц_                                               |                                                  | <u> </u> | <u> </u>                                         | لـــا           |          | _        |